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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/782,150	02/14/2001	Ralph E. Frazier	8686	2319

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EXAMINER	
YIGDALL, MICHAEL J	
ART UNIT	PAPER NUMBER
2122	5

DATE MAILED: 09/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/782,150	Applicant(s) FRAZIER, RALPH E.	
	Examiner Michael J. Yigdall	Art Unit 2122	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 February 2001 and 30 May 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 May 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Claims 1-10 have been examined. The date of priority considered for this application is 14 February 2001.

Specification

2. The attempt to incorporate subject matter into this application by reference to a copending patent application, "Operating Software Scheduling Priority Recorder," is improper because the application serial number has not been provided.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-10 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 09/782,151. Although the conflicting claims are not identical, they are not patentably distinct from each other because both recite analogous methods related to operating software scheduling information in a computer system.

For example, claim 1 of the present application recites a method of controlling system performance based on the analysis of scheduling information, while claim 4 of Application No. 09/782,151 recites a method of capturing this scheduling information, which includes data related to system performance such as run-time length. As well, claim 6 of the present application and claim 18 of Application No. 09/782,151 both recite computer systems for capturing operating software scheduling information during execution.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this

subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 6,282,560 to Eilert et al.

It is noted that applicant recites the following definitions (see page 10):

"The operating software can be either an operating system or an operating or executing application."

"Programs are applications, tasks, or processes that execute within the operating software environment."

"The scheduling information can be a count, a variable, or a system structure that the operating software updates and maintains in conjunction with the scheduling of a program."

With respect to claim 1, Eilert et al. disclose a computer implemented method of controlling system performance (see column 1, lines 23-28) comprising the steps of:

(a) analyzing operating software program scheduling information (see column 6, lines 34-43, which shows the steps of processing or analyzing processor use data, a type of scheduling information, and calculating performance indexes); and

(b) adjusting defined parameters to modify system performance (see column 6, lines 34-43, which shows the step of adjusting system resource controls to attain a level of performance).

With respect to claim 2, Eilert et al. disclose the method as claimed in claim 1, wherein the defined parameters include at least one of scheduling priority, program termination, delayed restart, and program load leveling (see column 10, lines 17-24, which shows dispatching priority as an exemplary resource control parameter; dispatching priority is considered equivalent to scheduling priority).

With respect to claim 3, Eilert et al. disclose the method as claimed in claim 1, wherein the program scheduling information includes at least one of a count of the number of program schedules, a count of the number of program preempts, a count of the number of interrupts, a highest priority attained, a lowest priority attained, a program identity, a length of run-time, a count of the number of times in the idle loop, a count of the duration of the idle loop, a sequential record of scheduled programs, a sequential record of priorities, a sequential record of events, a count of the number of programs waiting to run per schedule time, and an identity of programs waiting to run per schedule time (see column 7, lines 15-47, which shows the step of determining a program identity using an identification procedure).

With respect to claim 4, Eilert et al. disclose the method as claimed in claim 1, wherein said analysis step includes determining at least one of a system processing capability, a number of programs scheduled, a program run-time priority, a length of time each program executed, a number of preemptions, a number of interrupts, and an amount of idle time (see column 10, lines 47-52, which shows the step of determining the amount of time a task should be made non-dispatchable, i.e. the amount of idle time).

With respect to claim 5, Eilert et al. disclose the method as claimed in claim 1, further comprising the step:

(c) monitoring operating software scheduling information (see column 10, lines 1-4, which shows the step of monitoring system resource utilization).

With respect to claim 6, Eilert et al. disclose a computer system for capturing operating software scheduling information during execution of said operating software (see for example

column 8, lines 36-46, which shows the capture of real-time service data during execution) comprising:

(a) a processor for receiving and transmitting data (see column 1, lines 23-28, which shows a processor used for real-time data streams); and

(b) a memory coupled to the processor, the memory having stored therein sequences of instructions which, when executed by the processor, cause the processor to analyze operating software scheduling information, and adjust defined parameters to modify system performance (see parts (a) and (b) of claim 1 above; see also column 13, lines 46-53, which shows computer readable program code, i.e. sequences of instructions; note that memory for storing the instructions is inherent to the computer system).

With respect to claim 7, Eilert et al. disclose the computer system as claimed in claim 6, wherein the memory further includes sequences of instructions to monitor operating software scheduling information (see claims 5 and 6 above).

With respect to claim 8, Eilert et al. disclose the computer system as claimed in claim 6, wherein the defined parameters include at least one of scheduling priority, program termination, delayed restart, and program load leveling (see claim 2 above).

With respect to claim 9, Eilert et al. disclose the computer system as claimed in claim 6, wherein the program scheduling information includes at least one of a count of the number of program schedules, a count of the number of program preempts, a count of the number of interrupts, a highest priority attained, a lowest priority attained, a program identity, a length of run-time, a count of the number of times in the idle loop, a count of the duration of the idle loop, a sequential record of scheduled programs, a sequential record of priorities, a sequential record

of events, a count of the number of programs waiting to run per schedule time, and an identity of programs waiting to run per schedule time (see claim 3 above).

With respect to claim 10, Eilert et al. disclose the computer system as claimed in claim 6, wherein the analysis includes determining at least one of a system processing capability, a number of programs scheduled, a program run-time priority, a length of time each program executed, a number of preemptions, a number of interrupts, and an amount of idle time (see claim 4 above).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Pat. No. 6,467,052 to Kaler et al. discloses a method for analyzing the performance of a computer system. U.S. Pat. No. 6,438,704 to Harris et al. discloses a method for scheduling system resources. U.S. Pat. No. 6,591,262 to MacLellan et al. discloses a workload management system.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Yigdall whose telephone number is (703) 305-0352. The examiner can normally be reached on Monday through Friday from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Michael J. Yigdall
Examiner
Art Unit 2122

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September 3, 2003

JOHN CHAVIS
PATENT EXAMINER
ART UNIT 2124